This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Withdrawn) A nucleic acid sequence that codes a gene product or a portion thereof, comprising

a) a nucleic acid sequence, selected from the group Seq. ID Nos. 14-18, 30, 31, and 52,

b) an allelic variation of the nucleic acid sequences named under a)

or

c) a nucleic acid sequence that is complementary to the nucleic acid sequences named under a) or b).

2. (Withdrawn) A nucleic acid sequence according to one of the sequences Seq. ID Nos. 14-18, 30, 31, 52, or a complementary or allelic variant thereof.

3. (Withdrawn) Nucleic acid sequence Seq. ID No. 1 to Seq. ID No. 31 and Seq. ID 52, characterized in that it is expressed elevated in hysteromyomic tissue.

4. (Withdrawn) BAC, PAC and cosmid clones containing functional genes and their chromosomal localization according to sequences Seq. ID No. 1 to Seq. ID No. 31 and Seq. ID 52 for use as vehicles for gene transfer.

5. (Withdrawn) A nucleic acid sequence according to claims 1 to 4, wherein it has 90% homology to a human nucleic acid sequence.

6. (Withdrawn) A nucleic acid sequence according to claims 1 to 4, wherein it has 95% homology to a human nucleic acid sequence.

7. (Withdrawn) A nucleic acid sequence comprising a portion of the nucleic acid sequences named in claims 1 to 6, in such a sufficient amount that they hybridize with the sequences according to claims 1 to 6.

8. (Withdrawn) A nucleic acid sequence according to claims 1 to 7, wherein the size of the fragment has a length of at least 50 to 4500 bp.

9. (Withdrawn) A nucleic acid sequence according to claims 1 to 7, wherein the size of the fragment has a length of at least 50 to 4000 bp.

10. (Withdrawn) A nucleic acid sequence according to one of claims 1 to 9, which codes at least one partial sequence of a bioactive polypeptide.

11. (Withdrawn) An expression cassette, comprising a nucleic acid fragment or a sequence according to one of claims 1 to 9, together with at least one control or regulatory sequence.

12. (Withdrawn) An expression cassette, comprising a nucleic acid fragment or a sequence according to claim 11, in which the control or regulatory sequence is a suitable promoter.

13. (Withdrawn) An expression cassette according to one of claims 11 and 12, wherein the DNA sequences located on the cassette code a fusion protein, which comprises a known protein and a bioactive polypeptide fragment.

14. (Withdrawn) Use of nucleic acid sequences according to claims 1 to 10 for producing full-length genes.

15. (Withdrawn) A DNA fragment, comprising a gene, that can be obtained from the use according to claim 14.

16. (Withdrawn) Host cell, containing as the heterologous part of its expressible genetic information a nucleic acid fragment according to one of claims 1 to 10.

17. (Withdrawn) Host cell according to claim 16, wherein it is a prokaryotic or eukaryotic cell system.

18. (Withdrawn) Host cell according to one of claims 16 or 17, wherein the prokaryotic cell system is E. coli, and the eukaryotic cell system is an animal, human or yeast cell system.

19. (Withdrawn) A process for producing a polypeptide or a fragment, wherein the host cells according to claims 16 to 18 are cultivated.

20. (Withdrawn) An antibody that is directed against a polypeptide or a fragment that is coded by the nucleic acids of sequences Seq. ID Nos. 1-31 and Seq. ID 52, which can be obtained according to claim 19.

21. (Withdrawn) An antibody according to claim 20, wherein it is monoclonal.

22. (Withdrawn) An antibody according to claim 20, wherein it is a phage display antibody.

23. (Previously Presented) An isolated polypeptide comprising SEQ ID NO:38.

24. (Previously Presented) An isolated polypeptide having at least 80% homology to SEQ ID NO: 38 according to claim 23 and wherein said polypeptide is a human mRNA putatively prenylated protein.

25. (Previously Presented) A polypeptide from a phage display that can bind to the polypeptide according to claim 23.

26. (Previously Presented) An isolated polypeptide having at least 90% homology to SEQ ID NO:38 according to claim 23 and wherein said polypeptide is a human mRNA putatively prenylated protein .

27. (Withdrawn) A method for finding an active ingredient against hysteromyoma comprising measuring the binding of said ingredient to the isolated polypeptide sequence comprising SEQ ID NO:38 according to claim 23.

28. (Withdrawn) A method for finding an active ingredient against hysteromyoma comprising measuring the binding of said ingredient to the polypeptide encoded by the nucleic acid comprising SEQ ID NO:16.

29. (Withdrawn) The nucleic acid comprising SEQ ID NO:16 according to claim 28, wherein said sequence is in the sense or antisense form.

30. (Withdrawn) A method for treating hysteromyoma comprising administering a therapeutically effective amount of a polypeptide comprising SEQ ID NO:38 according to claim 23.

31. (Withdrawn) A method for preparing a pharmaceutical composition for treating hysteromyoma comprising mixing a pharmaceutically acceptable carrier with a polypeptide comprising SEQ ID NO:38 according to claim 23.

32. (Withdrawn) Pharmaceutical agent, containing at least one polypeptide partial sequence Seq. ID No. 32 to Seq. ID No. 51 and Seq. ID Nos. 53-55.

33. (Withdrawn) A nucleic acid sequence according to claims 1 to 10, wherein it is a genomic sequence.

34. (Withdrawn) A nucleic acid sequence according to claims 1 to 10, wherein it is an mRNA sequence.

35. (Withdrawn) Genomic genes, their promoters, enhancers, silencers, exon structure, intron structure and their splice variants, that can be obtained from cDNAs of sequences Seq. ID No. 1 to Seq. ID No. 31 and Seq. ID 52.

36. (Withdrawn) Use of the genomic genes according to claim 33, together with suitable regulatory elements.

37. (Withdrawn) Use according to claim 36, wherein the regulatory element is a suitable promoter and/or enhancer.

38. (Withdrawn) A nucleic acid sequence according to claims 1 to 7, wherein the size of the fragment has a length of at least 300 to 3500 bp.

39. (Withdrawn) A method for determining whether a compound is active against hysteromyoma comprising measuring the binding of said ingredient to the isolated polypeptide according to claim 24.

40. (Withdrawn) A method for determining whether a compound is active against hysteromyoma comprising measuring the binding of said ingredient to the isolated polypeptide according to claim 26.